

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-25 (cancelled)

Claim 26 (new): In combination, a device for cleaning fire tubes in a boiler, comprising a scraper member that is fixed to a movement member for moving said scraper member through one fire tube at a time, a guide for positioning the scraper member directly in front of the open end of a fire tube such that this is movable from the guide into the fire tube and conversely from the fire tube into the guide, a boiler provided with fire tubes, which fire tubes open at one end of the boiler, wherein the guide is movable transversely with respect to the longitudinal direction of the fire tubes on a frame that is located at the end of the boiler where the fire tubes open, and wherein a flue box is located at the end of the boiler where the fire tubes open, which flue box has openings that are each located opposite a fire tube, wherein said openings are each provided with a closing valve and the device is provided with an operating mechanism that can be brought into interaction with one of the closing valves in each case for opening said closing valve.

Claim 27 (new): The combination according to claim 26, wherein the guide is mounted on a boom, which boom is mounted on the frame such that it is movable in the vertical and horizontal direction, and wherein the operating mechanism is at the free end of the boom.

Claim 28 (new): The combination according to claim 26, wherein the guide comprises a tube.

Claim 29 (new): The combination according to claim 26, wherein the movement member is flexible, such as a cable.

Claim 30 (new): The combination according to claim 28, wherein the tube is movable in the longitudinal direction between a retracted position outside the flue box and a projecting position in the flue box, wherein the openings in the flue box are each aligned with an associated fire tube, and wherein the tube, in the projecting position, forms an essentially straight guide for the scraper member between the opening and associated fire tube.

Claim 31 (new): The combination according to claim 30, wherein drive means are provided for driving the movement member through the tube, wherein the position where the drive means engage on the movement member is essentially on the axis of the opening and associated fire tube.

Claim 32 (new): The combination according to claim 26, wherein the scraper member comprises a brush that has at least one open segment in cross-section.

Claim 33 (new): The combination according to claim 32, wherein the open segment or several open segments together leave between a quarter and half of the circular cross-section of the fire tube free.

Claim 34 (new): The combination according to claim 26, wherein there is a contaminant discharge at the end of the fire tube that opens into the flue box.

Claim 35 (new): The combination according to claim 34, wherein the contaminant discharge has a clearance that is kept free between the guide when the latter is in the projecting position and the end of the fire tube that opens into the flue box.

Claim 36 (new): The combination according to claim 34, wherein the tube has a smaller diameter than the fire tube to make an annular clearance between them.

Claim 37 (new): The combination according to claim 34, wherein the guide has holes at the end facing the fire tube for discharging contaminants into the flue box.

Claim 38 (new): The combination according to claim 26, wherein the guide is movable vertically on the frame.

Claim 39 (new): The combination according to claim 26, wherein guide is movable horizontally on the frame.

Claim 40 (new): The combination according to claim 26, wherein the tube is mounted on the boom such that it is movable in the longitudinal direction, and a guide tube is provided that is fixed to the boom, which tube is mounted in a telescopic manner around the guide tube and in which guide tube the cable is accommodated.

Claim 41 (new): The combination according to claim 40, wherein a compressed air supply is connected to the guide tube.

Claim 42 (new): The combination according to claim 26, wherein the cable is fixed at one end to the scraper member and at the other end to a winding member such as a roller or drum and the like.

Claim 43 (new): The combination according to claim 26, wherein the winding member is supported on the boom.

Claim 44 (new): The combination according to claim 26, wherein the closing valves are each connected by means of a hinge to the flue box and the operating mechanism comprises a movable arm for turning the closing valve about the hinge.

Claim 45 (new): The combination according to claim 44, wherein the closing valve has a valve body as well as a lever that are on either side of the hinge, and the arm has a ram that is movable in the longitudinal direction to make the lever and valve body tip as a result of contact with the free end of the ram.

Claim 46 (new): The combination according to claim 26, wherein the closing valve is held pressed in the closed position under the influence of gravity.

Claim 47 (new): The combination according to claim 26, wherein the closing valve is held pressed in the closed position under the influence of spring force.

Claim 48 (new): The combination according to claim 26, wherein the closing valves are each connected by means of a bayonet fitting to the flue box, and the operating mechanism comprises a movable arm for pushing in and turning the closing valve.

Claim 49 (new): The combination according to claim 26, wherein the guide comprises a tube that is movable in the longitudinal direction thereof and that is provided on the outside, some distance away from its insertion end, with a gland to provide a seal between the opening and the tube inserted therein.

Claim 50 (new): A device for use when cleaning the heating surface of a tube changer, such as the fire tubes in a boiler, comprising a scraper member that is fixed to a movement member for moving said scraper member through one fire tube at a time, a guide for positioning the scraper member directly in front of the open end of a fire tube, such that said scraper member is movable from the guide into the fire tube and conversely from the fire tube into the guide, wherein the guide is movable on a frame transversely with respect to the longitudinal direction of the fire tubes, wherein the device is suitable for use with a boiler having a flue box, into the end of which the fire tubes open, which flue box has an opening provided with a closing valve opposite each fire tube, wherein the device has an operating mechanism that can be brought into interaction with a closing valve for opening and closing said closing valve.

Claim 51 (new): The combination according to claim 33, wherein the open segment or several open segments together leave one-third of the circular cross-section of the fire tube free.

Claim 52 (new): The combination according to claim 26, wherein the closing valves are each connected by means of a pipe section and the operating mechanism comprises a movable arm for turning the closing valve.

Claim 53 (new): The combination according to claim 26, wherein the closing valves are each connected by means of a bayonet fitting to a pipe section fixed thereto, and the operating mechanism comprises a movable arm for pushing in and turning the closing valve.